ABSTRACT OF THE DISCLOSURE

A method of making a microelectronic assembly is provided. Wetting and flow characteristics of a no-flow underfill material are improved by preheating the no-flow underfill material. In one embodiment, the no-flow underfill material is preheated in a dispensing apparatus before being dispensed on a substrate. A die is then placed on the substrate, whereafter interconnection elements between the die and the substrate are reflowed and the no-flow underfill material is cured. In another embodiment, the no-flow underfill material is preheated after a die is placed on a substrate with the no-flow underfill material between the die and the substrate. In a further embodiment, a no-flow underfill material is dispensed on a die, whereafter a substrate is placed on the die with the no-flow underfill material between the substrate and the die.